

Work Order ID 81985

81985

Page 1

March-21-12 1:55:21 PM

Item ID: D206-642-341

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Replacement Skidtube

Start Date: 21/03/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 04/04/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan: M L J

Date: 12/03/21

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D2650

F

100

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile and create labels per PPP D206-642-341 CHG003

N/A

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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NS1

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NS2

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Cust Item ID:

Required Date: 04/04/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110	Skidtubes	0.00							
110									
Skidtubes	Memo	0.00							
Skidtubes	1-Deburr Fwd edge of tube								
	2-Remove ridge on inside of Fwd edge of tube as per Dwg D2650								
	3-Weld Fwd Cap as per Dwg D2650. Use aluminum rod. Grind D2647 to fit as required. A/R Aluminum Rod <u>M120164</u>								
	4-Grind weld flush to cap on top surface only.								
	5-Cut aft end to length as per dwg D2650								
	6-Drill pilot holes using drill Jig DT8168A (A,& B) and DT8025. Open to Ø0.312"								
	7-Drill holes for wearplates using DT 8028-5. Open to Ø 0.297".								
	8-Open Aft Cap Hole using #6 Drill Bit								
	9-Open holes for Tow Ring to Ø0.625" as per Dwg D2650, D2650-5 Drilling Detail								
	10-Remove inner indexing ridge on aft end of skidtube as per Dwg D2650								
	11-Deburr and Blow out all chips from inside the tube								

att 12-03-23

*BBE 12/03/26
CF 12-3-28*

SAD 12-03-29

*12-3-28 CF
12-03-29*

W/O:		WORK ORDER CHANGES					
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Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
115	QC5- Inspect part completeness to step on W/O	0.00							
115									
QC	Memo	0.00							
Quality Control									
120	Chemical Conversion Coat per QSI005 4.1	0.00							
120									
HandFinish	Memo	0.00							
Hand Finishing									
125	QC7-Inspect Chemical Conversion Coat	0.00							
125									
QC	Memo	0.00							
Quality Control									

S 12/03/29

De 12/03/29

SAD

① 12-03-29

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Required Date: 04/04/2012 Req'd Qty: 1.00

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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							
130	Skidtubes								
Skidtubes		0.00							
Skidtubes	Memo 1-Open holes to finished size as per Dwg D2650, D2650-5 Drilling Detail (without cutting fluid) 2-Countersink crossbolt spacer holes as per Dwg D2650(without cutting fluid) 3-Deburr. Blow out chips. Grind alodine off around crossbolt spacer. 4-Bond D2654-5 web in place as per QSI 015Ensure holes line upAllow 12 Hrs. cure time before cutting Start Date: <u>12-03-29</u> Time: <u>1400</u> Finish Date: <u>12-04-03</u> Time: <u>10:30</u> A/RSikaflex-291 <u>m120813</u> Sikaflex expiry date: <u>2012/08/3</u>								
140	QC5- Inspect part completeness to step on W/O	0.00							
140									
QC	Memo	0.00							
Quality Control									

Q 12/63/29

SAD 12-03-29

1 2 26/12/02

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Cust Item ID:

Required Date: 04/04/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

150

0.00

150

Skidtubes

0.00

Skidtubes

Memo

1-Prep per QSI 005 and Insert cross bolt spacers D2649. Weld as per QSI 004 and Dwg D2650. Remember to back drill each hole to 0.25" before welding the other side. Use aluminum rod.
A/RAluminum Rod *m120164 BB 12/04/12*

2-Grind welds flush as per Dwg D2650. Masking Tape access to inside of the Skidtube

3-Counterbore 5/16" x 0.750" deep as per Dwg D2650Deburr

4- Install nut plate as per dwg

*→ CF 12-4-2**3-5/16 CC 12/4/12*

170

QC10- Inspect visual per QSI004- ground welds

0.00

170

QC

Memo

0.00

Quality Control

5.21.12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Setup Start *NS1*

Revision ID:

Item Name: Replacement Skidtube

Stop *NS2*

Start Date: 21/03/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 04/04/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

180 QC5- Inspect part completeness to step on W/O

0.00

180

QC

Memo

0.00

Quality Control

190 Pressure Wash per QSI005 4.3

0.00

190

HandFinish

Memo

0.00

Hand Finishing

Brush alodine tube on crossbolt spacer area, do not acid etch, do not dip tube in tank.

200 White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

200

Powdercoat

Memo

0.00

Powder Coating

START TIME: 2h36
OVEN TEMPERATURE: 320°F
FINISH TIME: 3h00

M120 222

1X PM-12/04/04

1 2P 12/04/04

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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81985

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N900040100

Setup Start *NS1*

Stop *NS2*

*** 1 ***

Cust Item ID:

*** 1 ***

Customer:

Reference:

Run Start *NR1*

Stop ***NR2***

Accept Qty	Reject Qty	Reject Number	Insp. Stamp

0.00

210

QC

Memo

0.00

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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March-21-12 1:55:21 PM

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 Revision ID: Stop *NS2*
 Item Name: Replacement Skidtube
 Start Date: 21/03/2012 Start Qty: 1.00 *1* Cust Item ID:
 Required Date: 04/04/2012 Req'd Qty: 1.00 *1* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
220		0.00							
220	HandFinishing								
HandFinish	Memo	0.00							
Hand Finishing	1-Install inserts & wearpads as per dwg D2922. Use a drop of Sikaflex inside insert holes before installing wearpad/wearplate. A/RSikaflex-291 <u>120318</u> Sikaflex expiry date: <u>12/08</u> 2-Install O-Rings D2651-3 on plugs D2651-I with Petroleum Jelly and install plugs as per Dwg D2650. Clean excess adhesive 3-Install MS27039-4-06 Screw 4-Inspect for foreign object per QSI 024 5-Install D2646 Aft Cap and seal with SikaflexClean excess adhesive A/RSikaflex-291 <u>120318</u> Sikaflex expiry date: <u>12/08</u> 6-Wing Walk as per Dwg D2650-5 and QSI 005 4.4 Batch: <u>120902</u>								

1 2 (DP) 12/04/12
 PTO →

W/O: 81985		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
2411	220	AS PER DETAIL "E" DRAWING ENO CAR ASSEMBLY WITH MS9784-1-08 SCREWS BATCH 121011.	BL	12-4-11	2.			

Part No: D206-642-341 PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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Work Order ID 81985

81985

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Accept

N900040100

Setup Start ***NS1***

Revision ID:

Item Name: Replacement Skidtube

Stop ***NS2***

Start Date: 21/03/2012 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 04/04/2012 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
230	QC3- Inspect Part Finish	0.00							
230									
QC	Memo	0.00							
Quality Control									
240	QC5- Inspect part completeness to step on W/O	0.00							
240									
QC	Memo	0.00							
Quality Control									
250	Packaging	0.00							
250									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D206-642-341								
	Location: _____								
	PPP Rev: _____								

PP 31989

12/5/3P

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Work Order ID 81985***81985***

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Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Replacement Skidtube

Start Date: 21/03/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 04/04/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start ***NR1***

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

260

QC21 - Final Inspection - Work Order Release

0.00

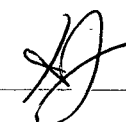
260

QC

Memo

0.00

Quality Control

12/5/3 

12-05-3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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81985

D206-642-341

Start Date: 21/03/2012

Required Date: 04/04/2012

Start Qty: 1.00

Required Qty: 1.00

IPP Rev: H05.10.11Added D3429-1 per CHG004KJ/CP/JLM

IPP Rev:I 08-09-29 revF as per dwg DD verified by:EC Est Rev:J 09-

03-02 as per DSI9440 rev.a DD verified by:EC IPP rev K 10.08.03 chg

ms27039-1-08 for "C" type EC verified by DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN960JD416 *AN960JD416* Washer	NAS1149D0463J	Purchased	No		12/255✓		Each	14.0000	**	1	1	12/04/12	
				<u>Location</u>			<u>Loc Qty</u>	<u>Loc Code</u>					
				ST351			14						
					116289		14						
CCR264SS3-3 *CCR264SS3-3* Cherry Rivet		Purchased	No				Each	581.0000	**			12/4/12	
				<u>Location</u>			<u>Loc Qty</u>	<u>Loc Code</u>					
				ST331			581						
					113973		2						
					117849		111						
					119017		468						
CR3212-4-03 *CR3212-4-03* Cherry Rivet		Purchased	No				Each	1,438.000	**			12/4/12	
				<u>Location</u>			<u>Loc Qty</u>	<u>Loc Code</u>					
				FP002			448						
					114859		448						
				ST331			990						
					110139		2						
					119017		988						

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Picklist Print

March-21-12 1:55:24 PM

Work Order ID: 81985

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Parent Item: D206-642-341

D206-642-341

Parent Item Name: Replacement Skidtube

Start Date: 21/03/2012

Required Date: 04/04/2012

Start Qty: 1.00

Required Qty: 1.00

D2620 Manufactured No

Each 24.0000

D2620

Skidtube, 206 Skidtube

**

1
① *JP* 12-03-23

Location

Loc Qty

Loc Code

LG

24

77999

1

79543

2

79544

2

79545

1

81365

10

81366

8

D2647 Manufactured No

Each 43.0000

D2647

Cap

**

1
DE 12/03/26

Location

Loc Qty

Loc Code

LG002

43

75482

43

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Picklist Print

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Work Order ID: *81985

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Parent Item: D206-642-341

D206-642-341

Parent Item Name: Replacement Skidtube

Start Date: 21/03/2012

Required Date: 04/04/2012

Start Qty: 1.00

Required Qty: 1.00

D2649

Manufactured No

Each

1,360.000

19

D2649

Cross Bolt Spacer

**

BE 12/04/02

Location

Loc Qty

Loc Code

LG

903

77574

2

79502

403

79503

399

79565

99

LG001

457

65317

1

68224

2

68507

11

71355

2

72704

2

72841

11

73390

8

73857

21

73858

53

73859

4

73860

4

78020

6

78583

2

79566

330

D2654-5

Manufactured No

Each

12.0000

1

D2654-5

Web

**

SAD 12-03-29

Location

Loc Qty

Loc Code

LG

12

80057

6

81326

6

B8126

①

March-21-12 1:55:25 PM

Shop Packet Print

Page 3

W/O:		WORK ORDER CHANGES					
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Parent Item: D206-642-341

D206-642-341

Parent Item Name: Replacement Skidtube

Start Date: 21/03/2012

Required Date: 04/04/2012

Start Qty: 1.00

Required Qty: 1.00

D2680-041

Manufactured No

Each

144.0000

1

D2680-041

Nut Plate

**

SA/CC 12/4/12

Location

Loc Qty

Loc Code

ST013

116

78016

116

ST019

28

76790

28

MS27039C1-08

Purchased

No

Each

1,594.000

56

MS27039C1-08

SCREW

**

56 2P 12/04/11

Location

Loc Qty

Loc Code

FP002

1

116022

1

ST292

1500

120308 ✓

1000

121068

500

ST293

93

116373

3

118077

14

119309

76

ALS4-1032-130

Purchased

No

220

Each

4,213.000

54

54

AI S4-1032-130

Insert

**

54 2P 12/04/11

Location

Loc Qty

Loc Code

ST280

283

119084

116

120671

167

ST281

3930

120807 ✓

1930

120837

2000

March-21-12 1:55:25 PM

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Page 4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 5

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Work Order ID: 81985

81985

Parent Item: D206-642-341

D206-642-341

Parent Item Name: Replacement Skidtube

Start Date: 21/03/2012

Required Date: 04/04/2012

Start Qty: 1.00

Required Qty: 1.00

AN960C10L

* NAS1149C0332 ✓
R

Purchased

No

121255

220

Each

0.0000

54

54

*AN960C10I *

washer

**

54 (20) 12/04/11

AN960JD10L

* NAS1149D0332J ✓

Purchased

No

120644 ✓

220

Each

0.0000

2

2

*AN960.ID10I *

Washer

**

2 (20) 12/04/11

D2646

Manufactured

No

220

Each

118.0000

1

1

D2646

Aft Cap

**

1 (20) 12/04/11

Location

Loc Qty

Loc Code

FP002

118

62678

5

68280

5

70945

1

71070

2

73294

1

73825

2

78018

24

79500 ✓

33

79562

45

March-21-12 1:55:25 PM

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Page 5

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 6

Work Order ID: 81985

Parent Item: D206-642-341

Parent Item Name: Replacement Skidtube

81985

D206-642-341

Start Date: 21/03/2012

Required Date: 04/04/2012

Start Qty: 1.00

Required Qty: 1.00

D2651-1

Manufactured No

220

Each

505.0000

14

14

D2651-1
Plug

**

14

SP

12/04/11

Location

Loc Qty

Loc Code

FP001

81809 ✓

799

57869

1

66445

10

69018

2

70827

2

70839

8

71037

8

77559

30

78584

188

79234

250

FP-A

-294

77559

1

78124

5

D2651-3

Manufactured No

220

Each

1,860.000

14

14

D2651-3
O-Ring

**

14

SP

12/04/11

Location

Loc Qty

Loc Code

FP001

16

61962

12

73828

4

FP-A

1844

78126 ✓

1844

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

March-21-12 1:55:25 PM

Page 7

Work Order ID: 81985

81985

Parent Item: D206-642-341

D206-642-341

Parent Item Name: Replacement Skidtube

Start Date: 21/03/2012

Required Date: 04/04/2012

Start Qty: 1.00

Required Qty: 1.00

D3535-11

Manufactured No

220

Each

21.0000

1

1

D3535-11

Wearshoe

**

DP 12/04/11

Location

Loc Qty

Loc Code

FP001

21

71284

6

79058 ✓

15

D3535-23

Manufactured No

220

Each

28.0000

1

1

D3535-23

Wearshoe

**

DP 12/04/11

Location

Loc Qty

Loc Code

FP001

28

74508

10

80330 ✓

18

D3535-35

Manufactured No

220

Each

25.0000

1

1

D3535-35

Wearshoe

**

DP 12/04/11

Location

Loc Qty

Loc Code

FP001

25

67598

1

70815

1

78873

13

79849

1

80332

9

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Page 7

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 8

Work Order ID: 81985

81985

Parent Item: D206-642-341

D206-642-341

Parent Item Name: Replacement Skidtube

Start Date: 21/03/2012

Required Date: 04/04/2012

Start Qty: 1.00

Required Qty: 1.00

D3536-11

Manufactured No

220 Each

28.0000 1 1

D3536-11

Gasket

**

1 SP 12/04/11

Location

Loc Qty

Loc Code

FP002

28

46649

1

46715

4

65574

1

80006 ✓

22

D3536-23

Manufactured No

220 Each

36.0000 1 1

D3536-23

Gasket

**

1 SP 12/04/11

Location

Loc Qty

Loc Code

FP002

36

43406

1

74510 ✓

9

80334 ✓

26

D3536-35

Manufactured No

220 Each

25.0000 1 1

D3536-35

Gasket

**

1 SP 12/04/11

Location

Loc Qty

Loc Code

FP002

25

80335 ✓

25

March-21-12 1:55:25 PM

Shop Packet Print

Page 8

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Work Order ID: 81985

81985

Parent Item: D206-642-341

D206-642-341

Parent Item Name: Replacement Skidtube

Start Date: 21/03/2012

Required Date: 04/04/2012

Start Qty: 1.00

Required Qty: 1.00

D3537-1 Manufactured No

220 Each

96.0000 6 6

D3537-1

Wearpad

**

6 (DP) 12/04/11

Location Loc Qty Loc Code

FP001 81361 91

79833 37

79835 54

FP002 5

69817 5

D3537-3 Manufactured No

220 Each

7.0000 1 1

D3537-3

Wearpad

**

1 (DP) 12/04/11

Location Loc Qty Loc Code

FP002 80338 7

74500 2

76986 5

MS27039-4-06 Purchased No

220 Each

183.0000 1 1

MS27039-4-06

Screw

**

1 (DP) 12/04/11

Location Loc Qty Loc Code

ST292 183

119075 183

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

QTY -1	QTY -3	QTY -5	QTY -7	PART NUMBER	DESCRIPTION
X				D2650-1	SKIDTUBE ASSEMBLY
	X			D2650-3	SKIDTUBE ASSEMBLY
		X		D2650-5	SKIDTUBE ASSEMBLY
			X	D2650-7	SKIDTUBE ASSEMBLY
1	1	1	1	D2600-1-160	EXTRUSION
1				D2654-1	WEB
	1			D2654-3	WEB
		1		D2654-5	WEB
			1	D2654-7	WEB
1	1	1	1	D2646	AFT CAP
1	1	1	1	D2647	CAP
17	18	19	23	D2649	CROSS BOLT SPACER
16	18	14	22	D2651-1	PLUG
16	18	14	22	D2651-3	O-RING
1	1	1	1	D2680-041	NUT PLATE
2	2			D3286-1	DOUBLER
2	2			D3286-3	STUD
42	44	54	60	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, ALS7-1032-130)
2	2	2	2	AN960JD10L	WASHER
2	2	2	2	CCR264SS3-3	RIVET
2	2	2	2	CR3212-4-03	RIVET
2	2	2	2	MS27039-1-08	SCREW
1	1	1	1	MS27039-4-06	SCREW
1	1	1	1	AN960JD416	WASHER
52	52			CR3212-4-04	RIVET

F

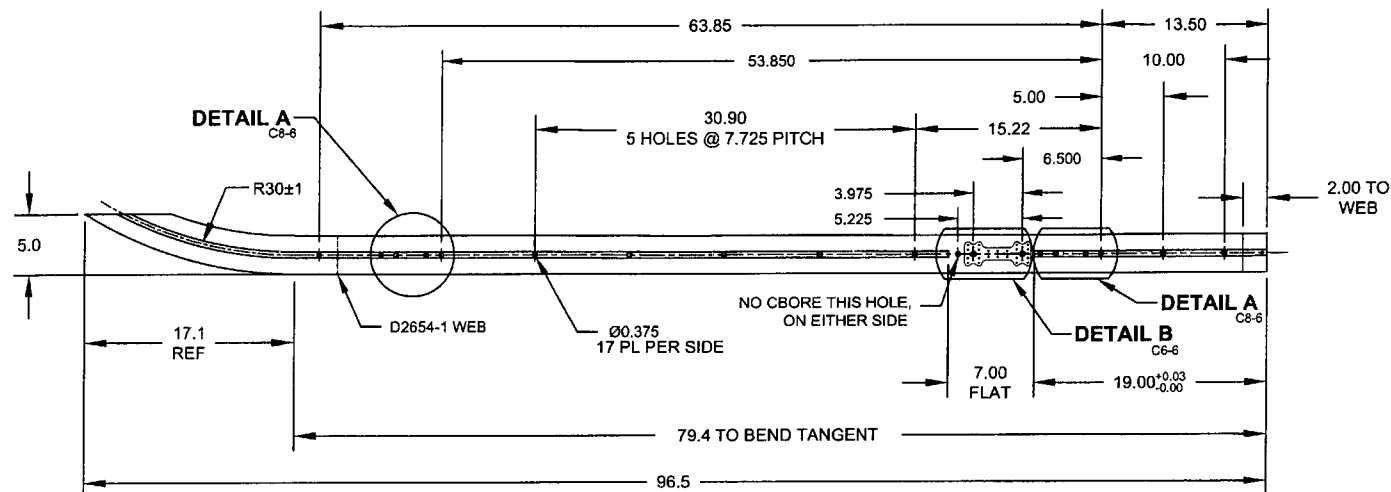
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 81985
120321

RELEASED
08-07-23

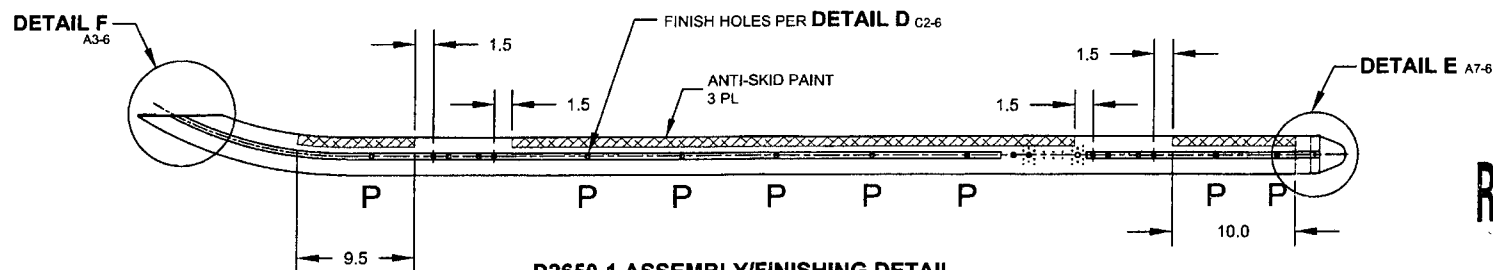
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: -CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
-POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
-BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A
- 8) WELD PER DART QSI 004
- 9) DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- 10) BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/291 ADHESIVE PER DART QSI 015
- 11) INSERT D2651-1 PLUG C/W D2651-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE)
- 12) DRILL Ø0.297 FOR ALS7-1032-130 INSERTS USING TEMPLATE DT8056-1 ON -1 TUBE, DT8056-3 ON -3 TUBE, DT8056-5 ON -5 TUBE, AND DT8056-7 ON -7 TUBE. INSTALL INSERTS AFTER FINISH.
- 13) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

F	DRAWING UPDATED TO CURRENT STANDARDS. SHT 6 ADDED. ALL SECTION AND DETAIL VIEWS TRANSFERRED TO SHT 6. SHT 1 IN PL PART D2649 QTY UPDATED. SHT 6 SECT C-C GRIND INSTRUCTIONS DELETED FROM NOTE 7 (SEE NCR 239).	AJS	08.08.08
E	REMOVE CBORE, CHG DRILL, ADD CHAMFER	CP	06.03.30
D	REDRAW; INCCRP, DE09136/9153/9163 MOD GROUND HANDLING ON D2650-1/-3	CP	04.05.17
C	CHANGE HOLE PATTERN AND FRONT END	DS	97.10.29
B	AS MANUFACTURED CHANGES	DS	97.06.26
A	NEW ISSUE	DS	97.03.25
REV.	DESCRIPTION	BY	DATE
DESIGN	DS	DART AEROSPACE USA, INC PORT HADLOCK, WA	
DRAWN	AJS		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. F
MFG. APPR.	<i>[Signature]</i>	D2650	SHEET 1 OF 6
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	206/407 SKIDTUBE ASSEMBLIES	NTS
DATE	08.08.08	COPYRIGHT © 1997 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	



D2650-1 BENDING/DRILLING DETAIL

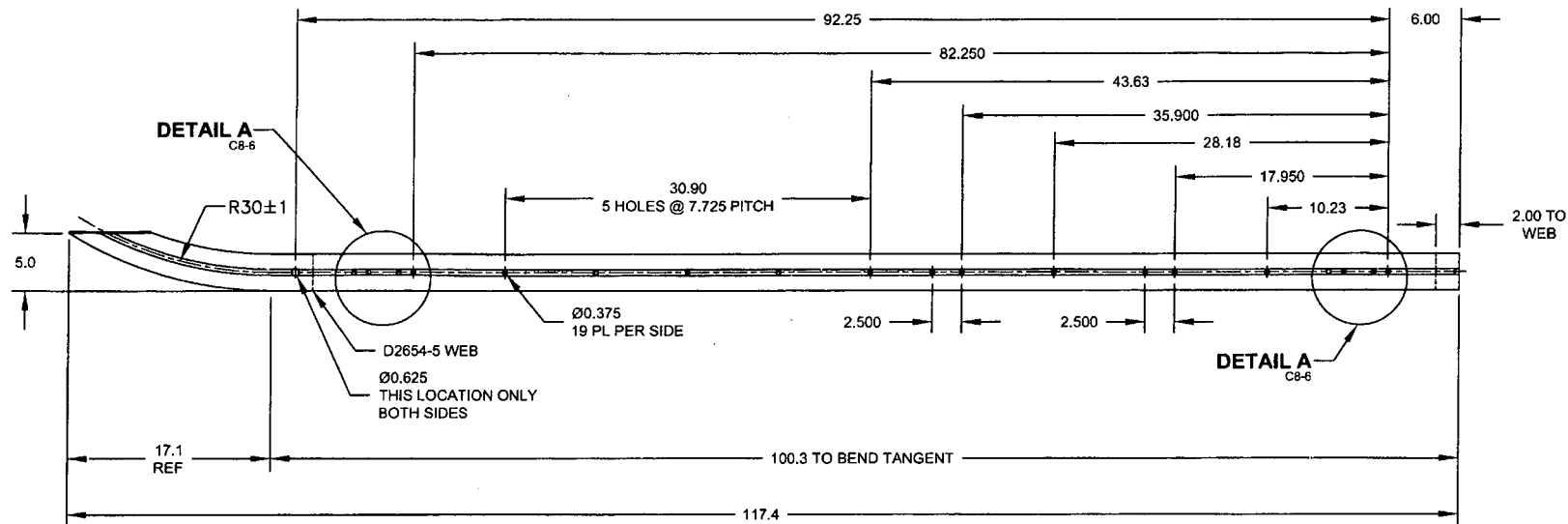


D2650-1 ASSEMBLY/FINISHING DETAIL

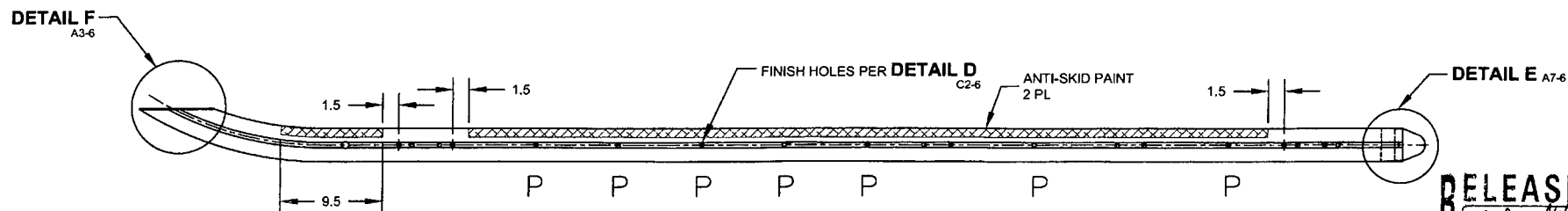
81985

RELEASED
680922/112

DESIGN	DS	DART AEROSPACE USA, INC	
DRAWN	AJS	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2650	SHEET 2 OF 6
APPROVED		TITLE	SCALE
DE APPR.		206/407 SKIDTUBE ASSEMBLIES	NTS
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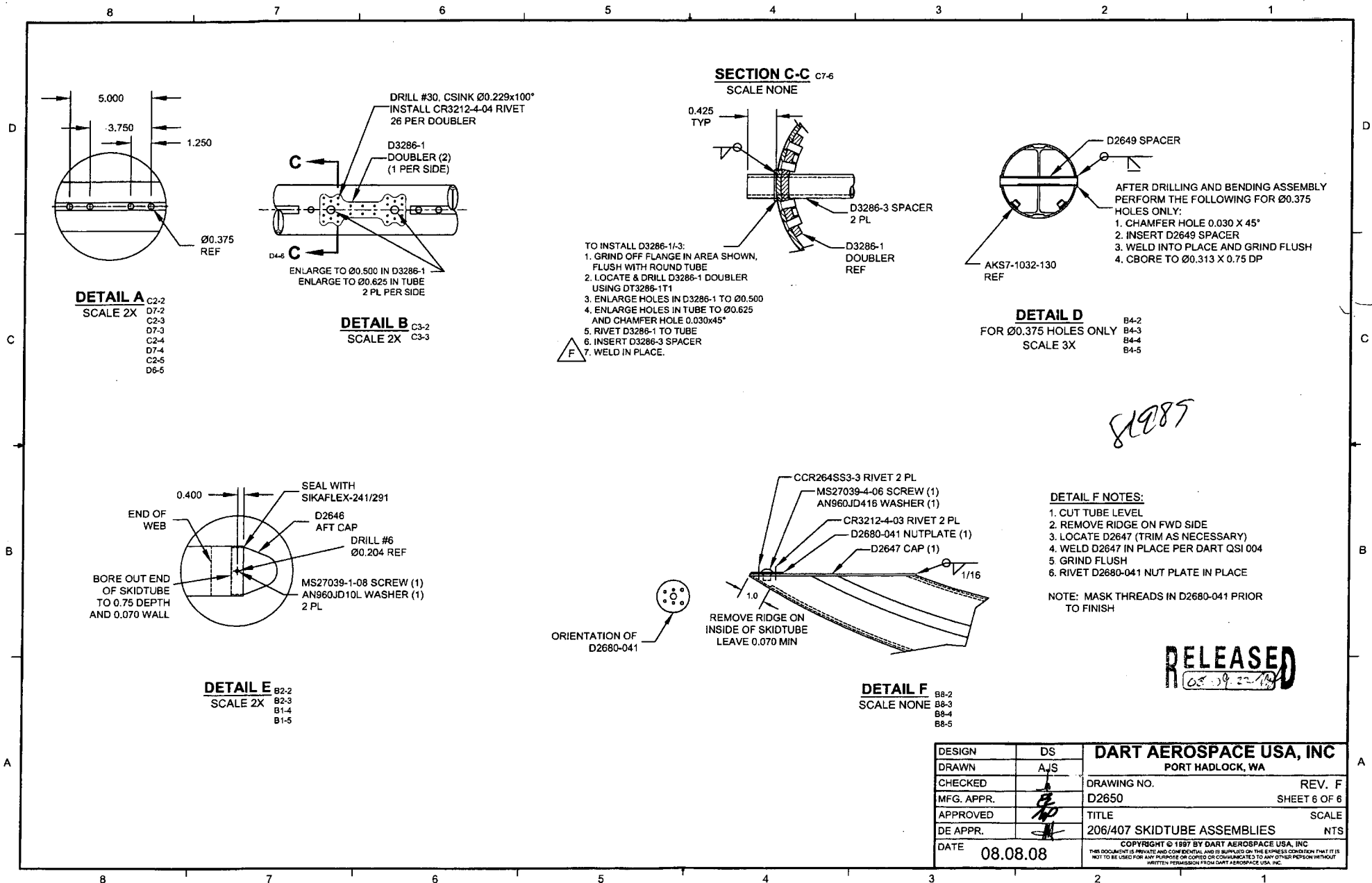
D2650-5 BENDING/DRILLING DETAIL



D2650-5 ASSEMBLY/FINISHING DETAIL

DESIGN	DS	DART AEROSPACE USA, INC	
DRAWN	AJS	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2650	SHEET 4 OF 6
APPROVED		TITLE	SCALE
DE APPR.		206/407 SKIDTUBE ASSEMBLIES	NTS
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RELEASED
08-09-2011



NO. 287

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job number: 796517
Part number: A206-646-341
Description: Skid tube
Welding Process: Tig[☒] Mig[☐]
Base material: Alum
Current: AC[☒] DC[☐]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[☐]
Penetration: pass[☒] fail[☐]

UNACCEPTABLE

Cracks: pass[☒] fail[☐]
Undercut: pass[☒] fail[☐]
Pin holes: pass[☒] fail[☐]
Overlap (cold lap): pass[☒] fail[☐]
Porosity (surface): pass[☒] fail[☐]
Coloration: pass[☒] fail[☐]

Qualifier David Lund Date of Test Coupon 12.04.03
Welder Barclay Elliott Date of Test Coupon 12.04.03

The above named individual is qualified in accordance with AWS D17.1.2001 to weld